Impact Evaluation Collaborative

Moving Economic Inclusion to Scale

IE WORKSHOP

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Mixed methods in impact evaluations

Deepening our understanding of impact

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Session outline

1. Key takeaways
2. What is mixed methods?
3. What is the value of mixed methods?
4. How to do mixed methods?

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Main takeaways

- **Why bother?**
  - A mixed method approach **strengthens quantitative impact evaluations**
- **When should I consider it?**
  - Need to **plan for it** from the outset
- **How should I go about it?**
  - **Multidisciplinary** teams & **joint** planning and reflection

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2. What is mixed methods?
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Defining mixed methods

"Mixed methods research means adopting a **research strategy** employing **more than one type of research *method***. The methods may be a **mix** or qualitative and quantitative methods, a mix of quantitative methods or a mix of qualitative methods." *(Brannen, 2005: 4)*

Mixed methods could be any sort of mixture!

Common tools

1. Administrative/ survey data, incl. monitoring

- **External sources**, e.g., data on characteristics of project sites, e.g., access rates, distance to markets
- **Internal monitoring systems** with data on ***program implementation***, e.g., participation rates, delivery times, and on beneficiaries' ***short-term outcomes***, e.g., take up and use of savings
- **Example:** India's National Rural Livelihoods Program (NRLM), *Kochar et al 2020*

Common tools

2. Individual interviews and case studies, incl. key informants

- **Semi-structured interviews** with beneficiaries, program staff, non-beneficiaries/ community members or other key informants
- Capture information on **context**, **process**, **life histories**, including **experience** with the program, etc. ➔ how, who, why…
- **Example:** *Terintambwe* program, Burundi, *Roelen et al. (2018)*

Common tools

3. Group discussions, incl. participatory exercises

- **Semi-structured activities** focused on aspects of the program or the context, including the characteristics of targeted groups and the factors that affect their socio-economic inclusion
- Best to capture **group experiences and attitudes**, rather than individual experiences
- **Example:** *Jeevika* program, India, *Hoffman et al. (2018)*

Common tools

4. Ethnographic methods and Participant observation

- Observing, first-hand, the **actual events** shaping participants' outcomes, including program processes. Involves prolonged stays in communities
- Identify **actual behaviors** that may not come up or are difficult to capture in surveys, helping minimize or remove social desirability bias
- **Example:** DRC, *Engaging Men through Accountable Practice* (EMAP) program – *Pierotti et al. (2018)*

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Benefits of using mixed methods

Quantitative experimental and non-experimental evaluation tell us ***whether programmes lead to change*** and how much.

Complementary methods tell us ***why and how change happens***, or why not.

Benefits of using mixed methods

- Explore **nature of impact**
  - Heterogeneity, unintended/lack of impacts, assumptions, beneficiaries' own views
- Understand **process**
  - Program implementation, particularly important when no evidence of impact
- Query **assumptions** underpinning ToC
  - Pathways to impact
- Understand **context**
  - Social, economic, cultural and institutional factors
- Gain insight **sensitive** or **hard-to-measure concepts**
  - Women's empowerment, domestic violence, community relations, etc.

Haku Wiñay in Peru

- **Quantitative evaluation:** RCT with DiD estimation, finds *positive impacts* on income, consumption, and asset and savings accumulation (Escobal and Ponce, 2016)
- **Qualitative evaluation**: 192 in-depth interviews, 24 group discussion, 116 observations of program activities – across 8 provinces within 5 regions (MIDIS, 2017)
  - Confirms results
  - Explored sources of heterogeneity, incl. cultural factors
  - Identified programmatic aspects constraining impact
    - Lack of flexibility in the choice of the technologies transferred by the project
    - Challenges in linking to markets

Women's entrepreneurship program in Ghana

- **Quantitative** impact evaluation: RCT measuring *impact on profits and growth of women's biz*
  - tests the relative effectiveness of providing i) unconditional cash grants; ii) grants conditional on savings goal; iii) cash conditional on training

- **Qualitative** research: *how intrahousehold dynamics affect women's biz*
  - In-depth interviews and administrative data on savings
  - Questions assumption: easing capital constraints facilitates business investments
  - Identifies issues that drive savings and investment decisions
  - Suggests role of safety nets and improving property rights for women

Friedson-Ridenour and Pierotti (2019)

Examples of mixed methods

CLM programme in Haiti

- *Targeted at poor women with children*
- *Components:*

- Enterprise selection and training
- Cash transfers (24 weekly transfers $5.60)
- Asset transfer (value of $155)
- Access to savings activities
- Emergency subsidies
- Weekly home-visits for monitoring, training and messaging
- Health messaging (12 messages on rotating basis)
- In-kind support (housing support, water filter)
- Village Assistance Committees (VACs)

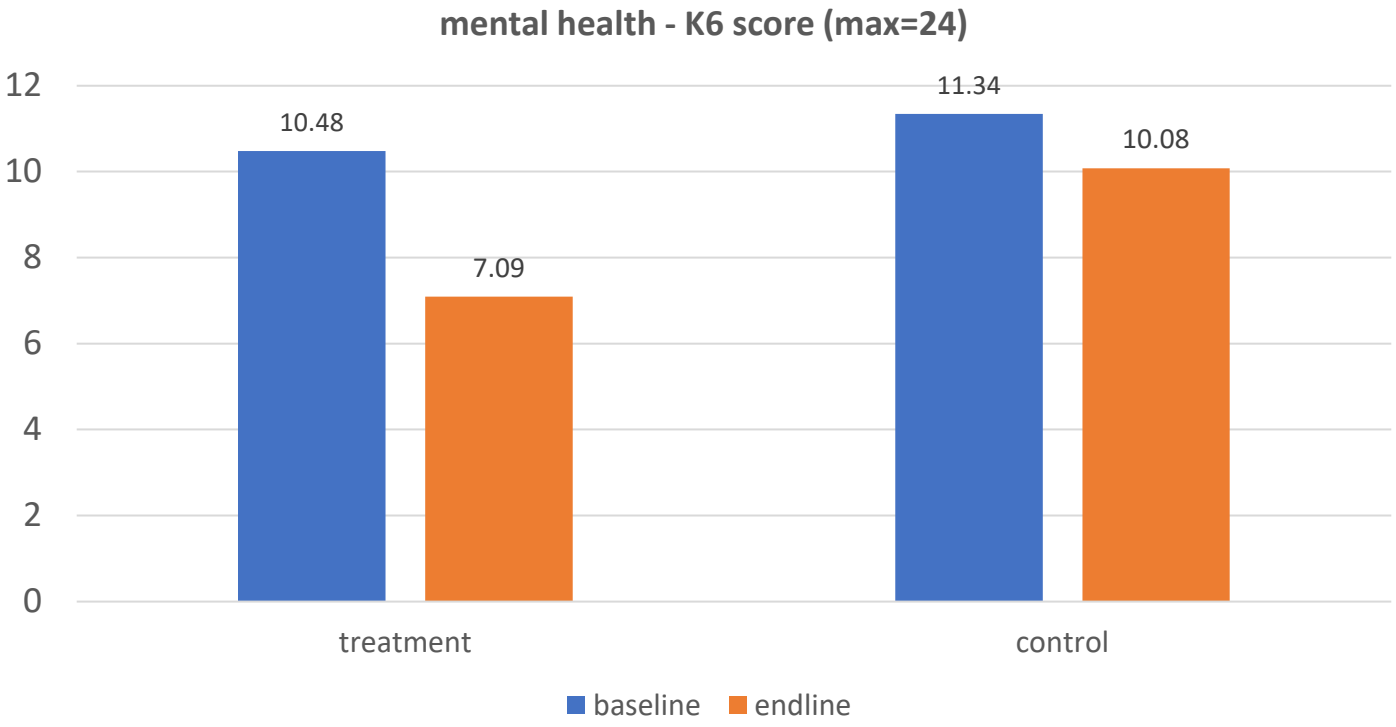
>> 18 months of accompaniment

Fonkoze

Examples of mixed methods

CLM programme in Haiti

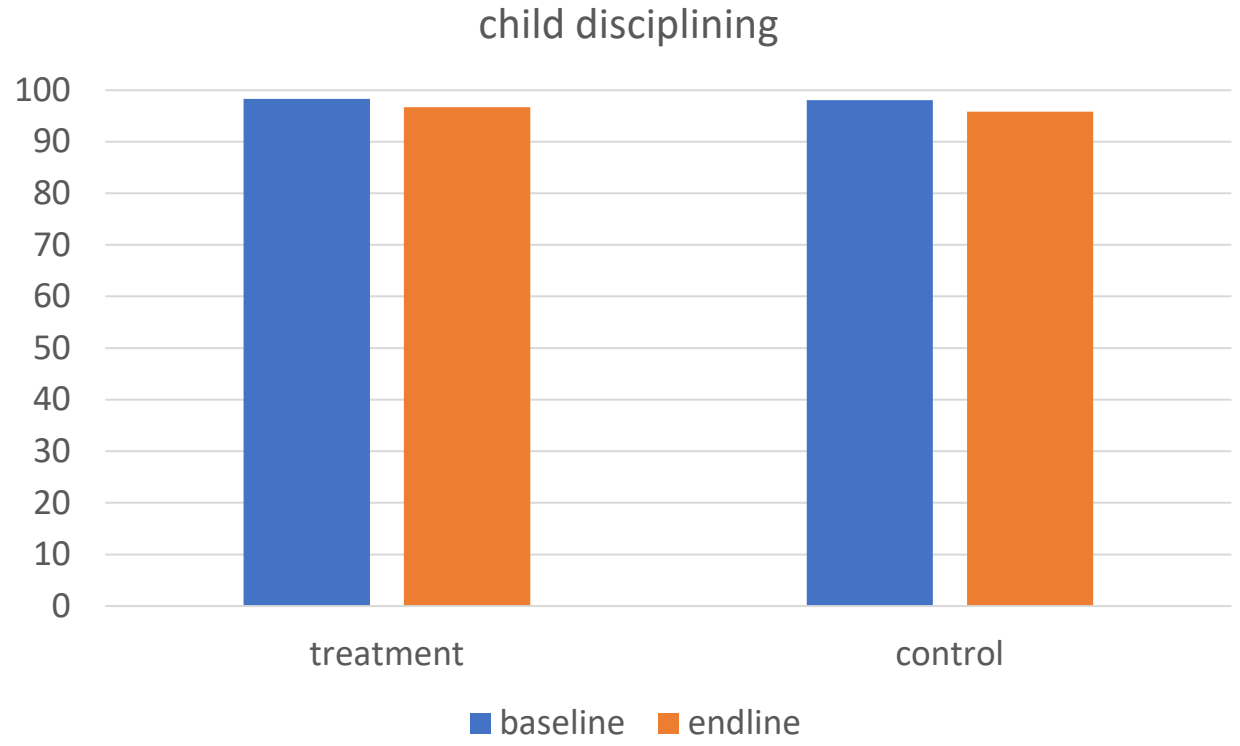
Positive impact on maternal mental health



Source: Roelen & Saha (2021)

CLM programme in Haiti

No impact on attitude to child disciplining ("it is okay to hit a child when disobedient")



>> *qualitative data* shows that:

- types of physical disciplining changed
- use of physical disciplining is used more sparsely
- beneficiaries received mixed messaging on use of physical disciplining from case managers

Source: Roelen & Saha (2021)

Examples of mixed methods

IN-SCT programme in Ethiopia

No impact on child nutrition outcomes

Table 5.16 Impact of IN-SCT (T) on child anthropometry for children age 6-23 months, compared to children in neighbouring nonbeneficiary households (C1)

Variables	Height-for-age (HAZ) score	Proportion of stunted children	Weight-for-height (WHZ)	Proportion of wasted children	Weight-for-age (WAZ)	Proportion of underweight children	Child BMI score (BMIZ)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
T vs C1	0.089	-0.066	0.216	-0.056	0.256	-0.084*	-2.163
	(0.192)	(0.056)	(0.165)	(0.035)	(0.158)	(0.044)	(5.207)
Observations	1,535	1,540	1,557	1,560	1,582	1,583	1,595

Source: UNICEF, MOLSA and IFPRI (2020)

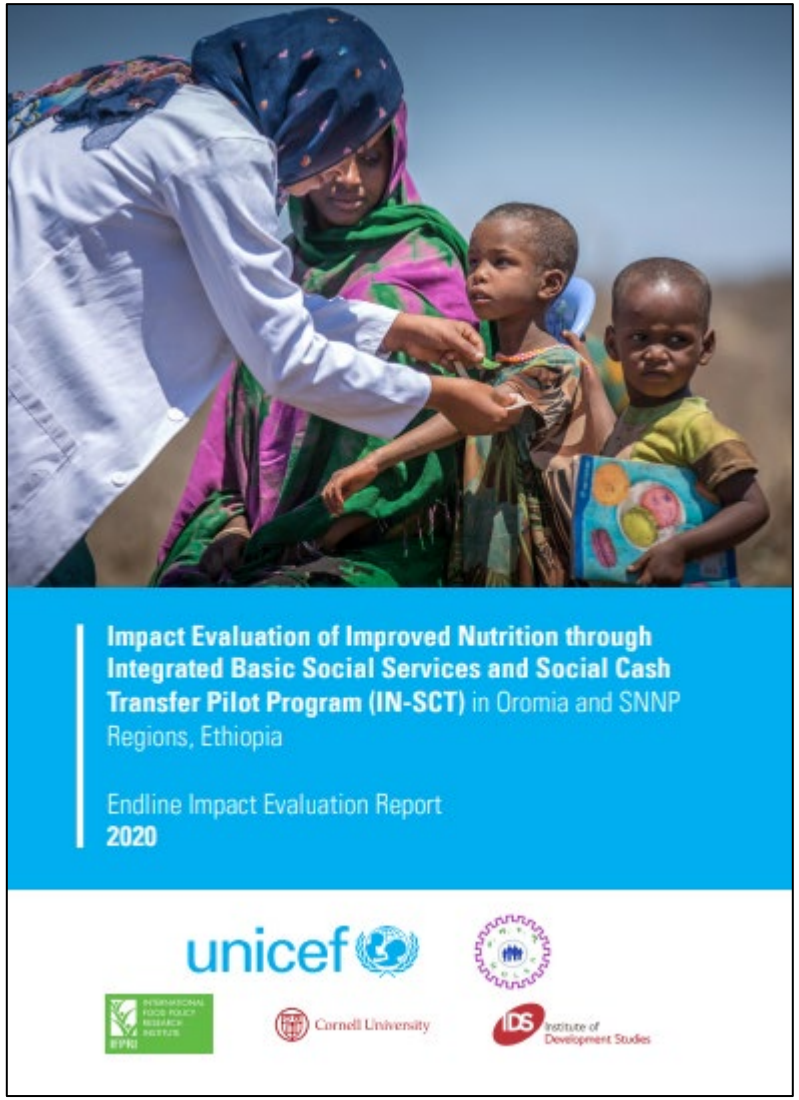
Examples of mixed methods

IN-SCT programme in Ethiopia

No impact on child nutrition outcomes

"Taking all of the evidence together, the impact evaluation shows that progress has been uneven. Gaps in delivery and budgetary and supervisory problems kept Social Workers from routinely traveling to communities to do their jobs. As a result, a greater burden for providing nutrition trainings and support fell to HEWs, rather than SWs. These challenges in delivering new nutrition programming also coincided with familiar challenges for the PSNP4 program, including small transfers and sometimes burdensome work requirements, as well as delays in making payments. Ultimately, all of these challenges meant that the IN-SCT program had almost no measurable impact on child nutrition outcomes"

Source: UNICEF, MOLSA and IFPRI (2020)



Benefits of using mixed methods

Before program implementation

- Contextualize theories
- Shape program
- Inform quantitative and qualitative evaluation tools

During program implementation

- Track and understand program implementation
- Understand motivation and experiences with program
- Investigate mechanisms of impact

After program implementation

- Triangulate and expand results of quantitative impact evaluation
- Build impact pathways

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Economic Inclusion in Rural Areas, Climate, Resilience, and Agriculture

Ignite Session

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FRAMING THE SESSION

Studies on Market Access, Resilience, Rural Livelihoods

1. Testing How to Support Smallholder Farmers' Market Access and Integration in Value Chains
    - Test: do demand interventions + ag training help connect farmers to value chains?
    - Show: Increasing **produce quality** is necessary to allow farmers to sell more and at higher prices
    - Show: ag trainings alone not enough. Need demand interventions to incentivize farmers to produce higher quality. Incentives also increase **farm yields and profits**.
2. The effects of introducing mobile money in rural Mozambique
    - Test: does mobile money affect household's livelihoods and resilience to shocks?
    - Show: mobile money allows households to support each other with transfers when climate or personal shocks hit
    - Show: household members more likely to migrate out of rural areas when mobile money is available
3. Can productive safety nets help households manage climatic variability?
    - Test: do economic inclusion programs improve households' resilience?
    - Show: impacts of productive interventions + cash transfers on **income diversification & smoothing** when climate shocks occur
    - Show: how to **use high-frequency data** to assess impacts on resilience

Thank you!

Presenter’s name
Contact

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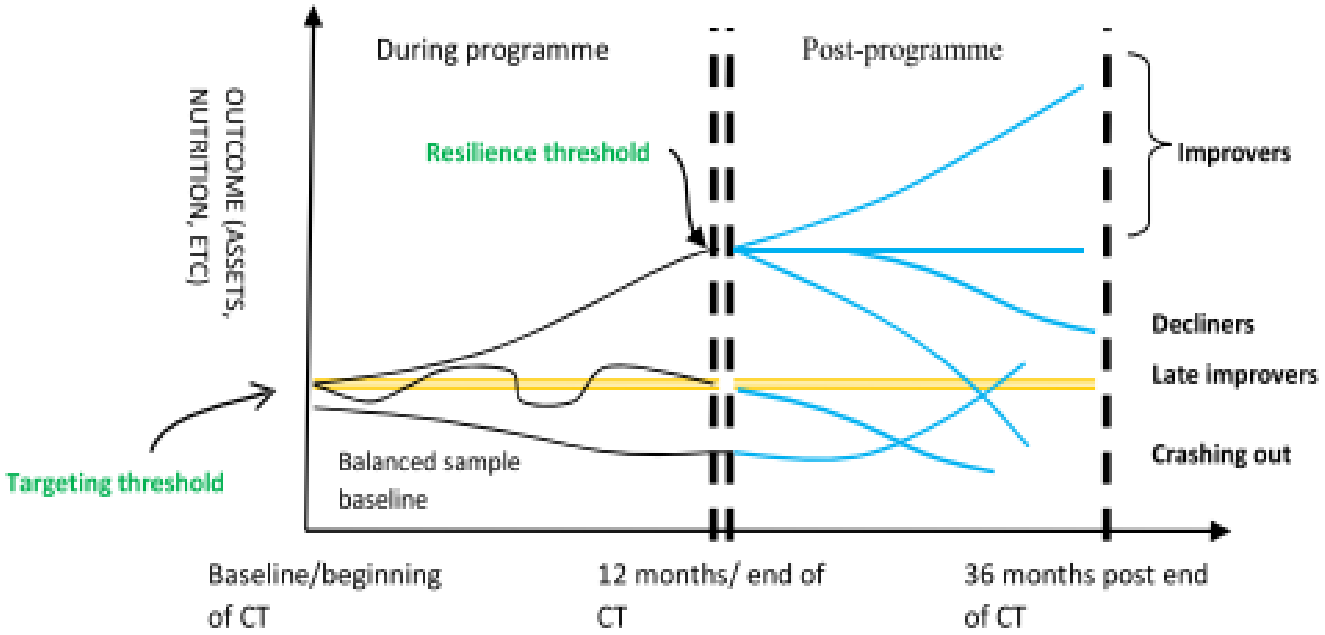
Options for using mixed methods

Sequential: one method informing the other

For example:

- Using qualitative data to design survey questionnaires
- Using qualitative data to verify or explain quantitative findings
- Using quantitative data analysis to decide on sample for qualitative research

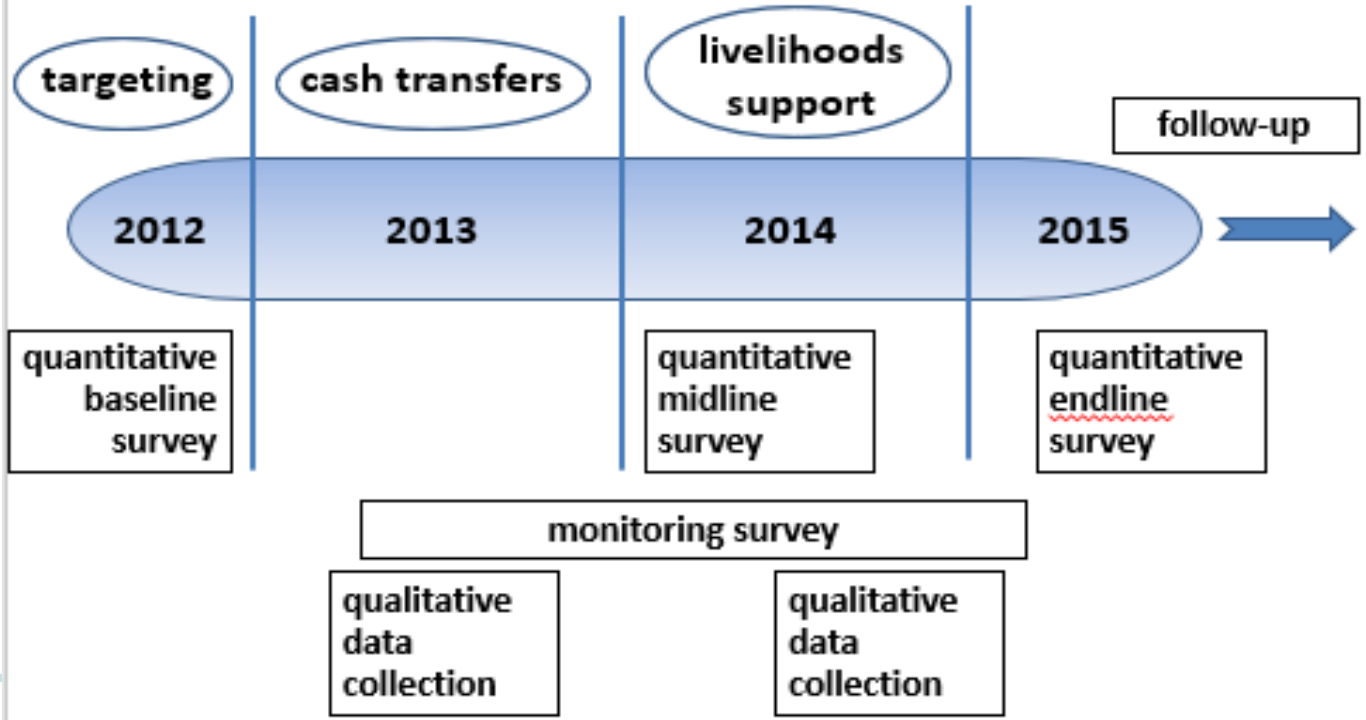


Source: Sabates-Wheeler et al (2018)

Options for using mixed methods

Parallel/ integrated: methods undertaken across programme period

- To investigate related sub-questions in answering the overall research question: understanding different pieces of the puzzle
- Combination of data occurs at stage of data analysis



Research design Terintambwe programme, Burundi

Practical considerations

- **Scope**
  - Thematic focus – possibility to be more open-ended
  - Plan ahead
- **Sampling** (qual)
  - Not representative of whole population, but can be stratified and informed by quant survey
  - Purposive sampling can allow for digging into detail for specific groups
  - Can be adjusted along the way in response to emerging results

Practical considerations

- **Data collection and analysis**
  - Consider appropriate timing as part of overall evaluation design (not an afterthought!)
  - Best if starts happening during data collection - role of supervisors
  - Foster joint reflection with quant team
- **Team**
  - Engage qualitative researchers for data collection and analysis
  - Include someone who speaks 'quant' and 'qual' language can help integration
- **Cost**
  - A little goes a long way!

Clinic 4

What could you do to incorporate mixed methods in your study?

How could different methods be incorporated?

Main takeaways

- **Why bother?**
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- **When should I consider it?**
  - Need to **plan for it** from the outset
- **How should I go about it?**
  - **Multidisciplinary** teams & **joint** planning and reflection

Thank you!

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Testing how to support smallholder farmers' market access and integration in value chains

Benedetta Lerva

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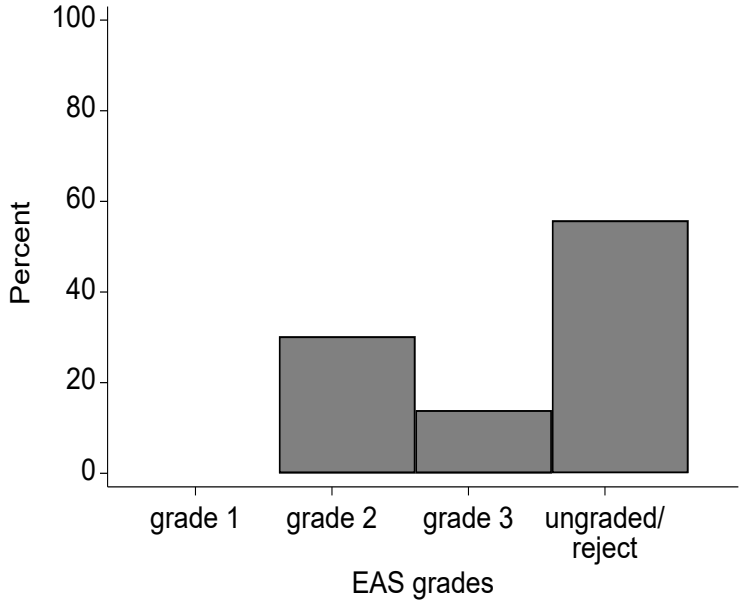
Connecting Farmers to Markets

- 80% of the world's poor live in rural areas
- 65% of poor working adults make a living through agriculture
- Many smallholder farmers are not integrated in quality value chains
  - Low technology use → Low quality → Low prices → Low incomes
- Farmers cannot participate in value chains if their produce is substandard
  - Cannot be sold in supermarkets
  - Cannot be used as input for processed foods
  - Cannot be exported

How can a program promote quality upgrading?

- Work by Bold, Ghisolfi, Nsonzi, Svensson in Uganda [Forthcoming, AER]
- Look at maize: commonly grown food crop among poorer households
  - Matters for nutrition
  - Matters for rural incomes

- Quality of maize is low in program area
  - Lab tests on samples of maize
  - Use East African Standard (EAS) grades
  - 60% is ungraded – not safe for consumption



How can a program promote quality upgrading?

Can think of two reasons:

- Farmers do not know how to improve quality of their maize
  - Lack of agricultural extension
- Farmers do not find it profitable to improve quality
  - Lack of demand for high quality maize
- Two RCTS:
  - [Agricultural Extension + Demand Intervention] vs Control
  - Agricultural Extension vs Control

Details of Interventions

1) [Agricultural Extension + Demand Intervention] vs Control
    - Demonstration plot in village
    - Meetings with extension agent in demo plot
    - Topics: plot preparation, planting, weed/pest management, harvest/post-harvest handling

2) Agricultural Extension vs Control
    - Buy only quality maize
    - Pay a 15% price premium on village price (5% town price)
    - Ensure quality with moisture meter, scale, visual inspection

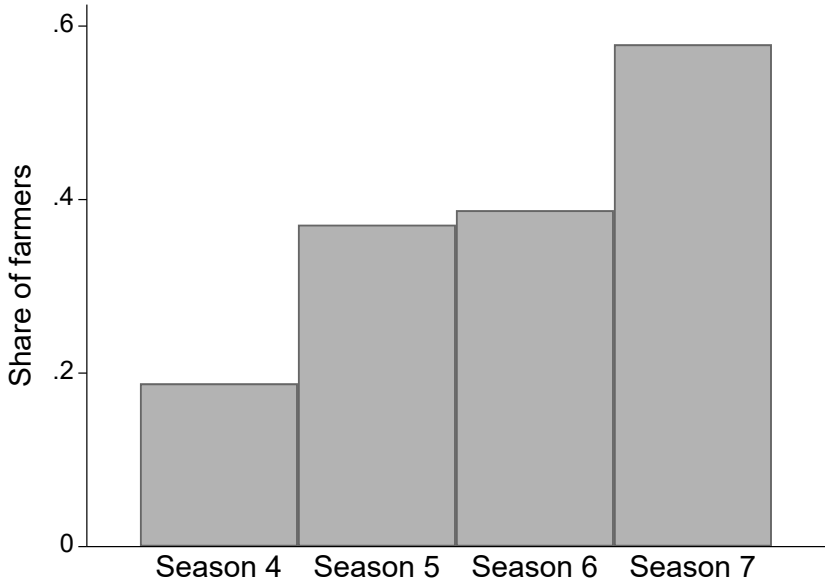
Details of Interventions

1) [Agricultural Extension + Demand Intervention] vs Control
    - 20 villages, 12 T, 8 C
    - 180 households, 104 T, 76 C

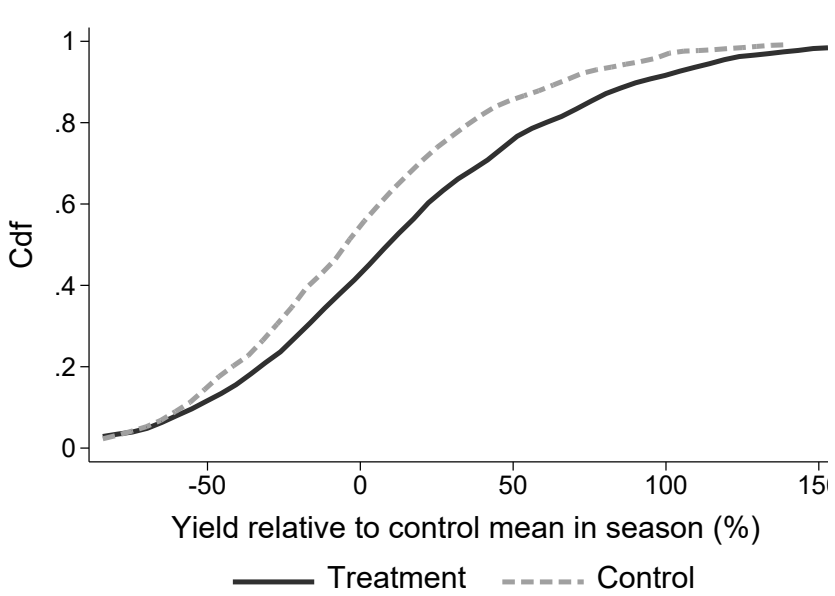
2) Agricultural Extension vs Control
    - 18 villages, 9 T, 9 C
    - 164 households (82 T, 82 C)

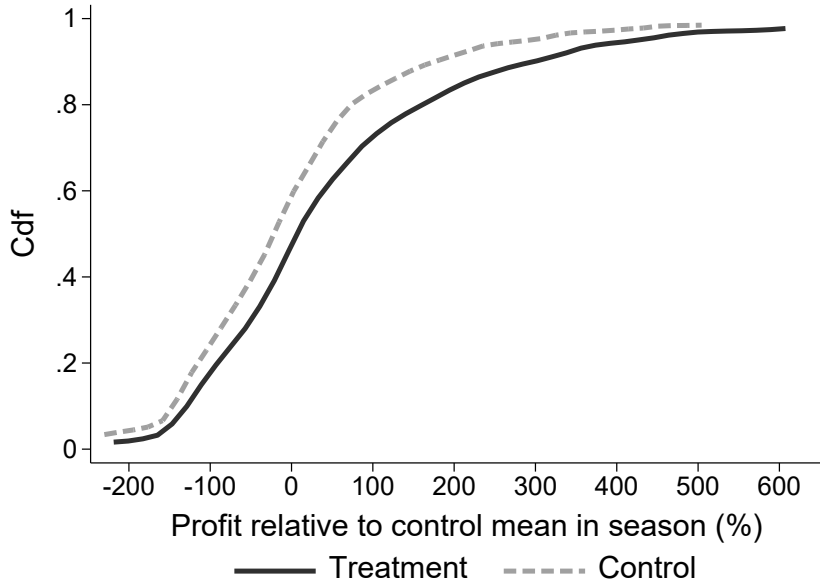
Results of Agricultural Extension + Market Intervention

- Farmers increase the quality of their maize, get higher yields and profits



Take-up: Farmers selling quality maize





Results of Agricultural Extension Only

- Nothing to show! No impacts on:
  - Prices
  - Maize acreage
  - Harvest
  - Harvest value
  - Yield
  - Monetary expenses
  - Profits

DISCUSSION

Quality Upgrading Leads to Economic Inclusion

- Impact of coupled intervention yields 36 - 80% increase in profits
- Need for demand side interventions
  - Thus far, mainly supply side interventions with farmers (trainings, subsidies…)
- Demand side interventions may be costlier but cost-effective in long run
- Some examples of policies that could enforce quality standards
  - Government bulk purchases
  - Home-grown school feeding
  - Favor entry of exporters

Thank you!

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Economic Inclusion Program and Resilience

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How to assess program impacts on “resilience”?

- Increasing frequency of shocks (climate change,…) and focus on resilience

- Do economic inclusion interventions help households become more resilient?
- Do they help beneficiaries protect themselves better against future shocks?

- Two approaches to document impacts on resilience
    - Measure how program impacts vary by households’ exposure to shocks
        - Compare beneficiary households and control households affected by shocks to see if beneficiary households are better protected (after the program)
        - E.g. Nicaragua productive safety net pilot
    - Follow the dynamics of welfare over time. See if beneficiaries have less spells in food insecurity.
        - E.g. WFP resilience programs

Productive safety net pilot in Nicaragua

Objective: Promote upward mobility and improve risk-management through livelihood diversification

Enhance households' income portfolio and facilitate livelihood diversification to strengthen households' ex-ante risk management strategies and reduce poverty in a more sustainable way.

Does diversification help households become more resilient and deal with shocks beyond the short-term?

The productive safety net intervention in Nicaragua

- Context in Nicaragua: rural areas with high poverty, dependence in subsistence agriculture
- Combine CCT with interventions aiming to increase the productive capacity of poor household

Randomized assignment into 3 groups of households

GROUP 1	GROUP 2	GROUP 3
Basic CCT	Basic CCT + Productive investment grant	Basic CCT + Vocational training

Impact Evaluation Design

1. **Public Lottery within selected municipalities,** to randomly select
   - 50 Control communities
   - 56 Treatment communities
2. **Within each treatment communities**, public lottery to assign households to 3 packages

1000 → **Basic CCT**

1000 → **Basic CCT + Productive investment grant**

1000 → **Basic CCT + Vocational training**

Can productive safety nets facilitate risk-management? Impact evaluation questions

2 years after the end of the program…

1. Do beneficiaries have higher welfare on average?

   -> Compare all households in treatment and control groups

2. Are beneficiaries protected against droughts?

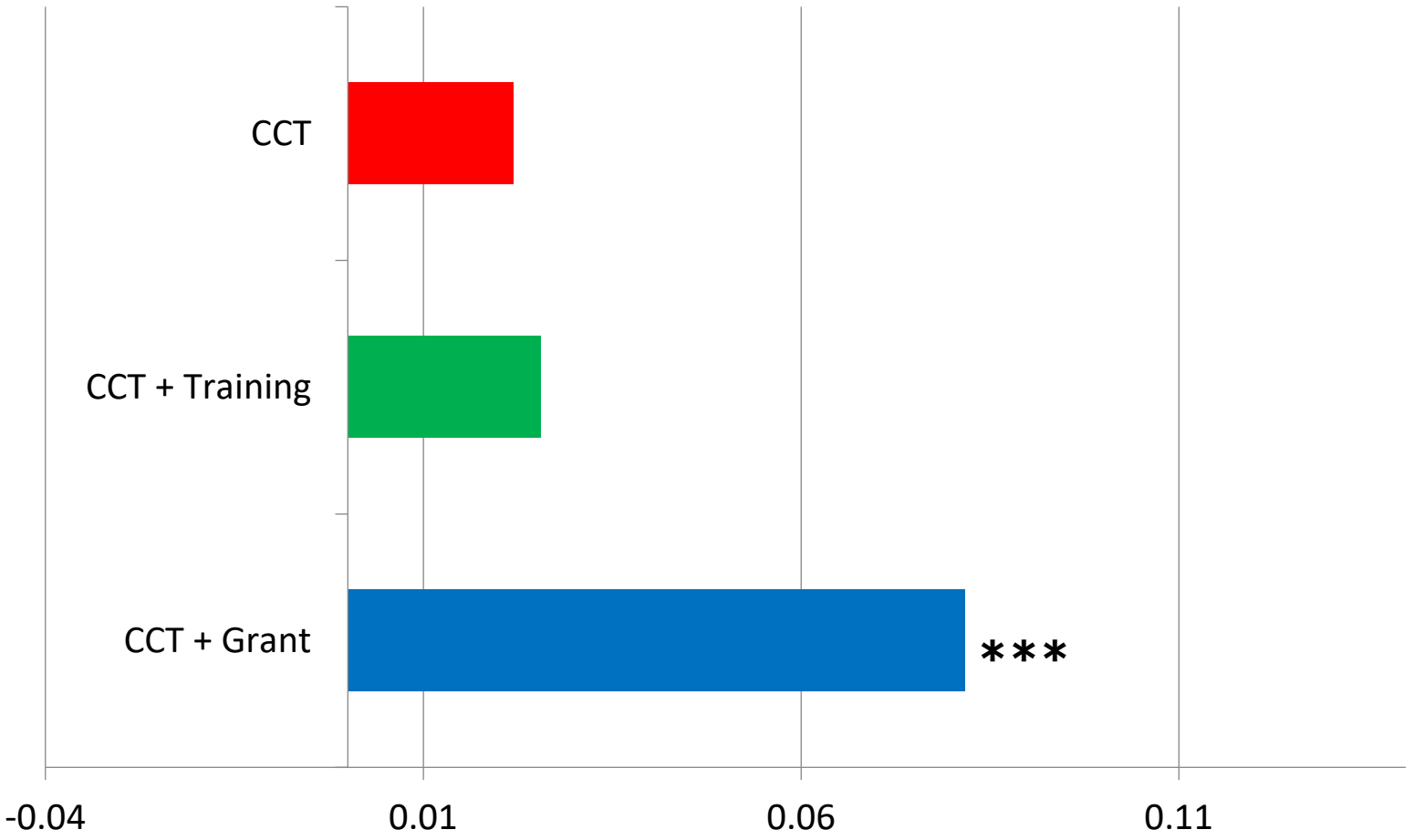
   -> Analyze how impact vary by degree of exposure to shocks

   -> Compare households hit by shocks in treatment and control groups

3. Which productive package is more effective in protecting beneficiaries against drought shocks?

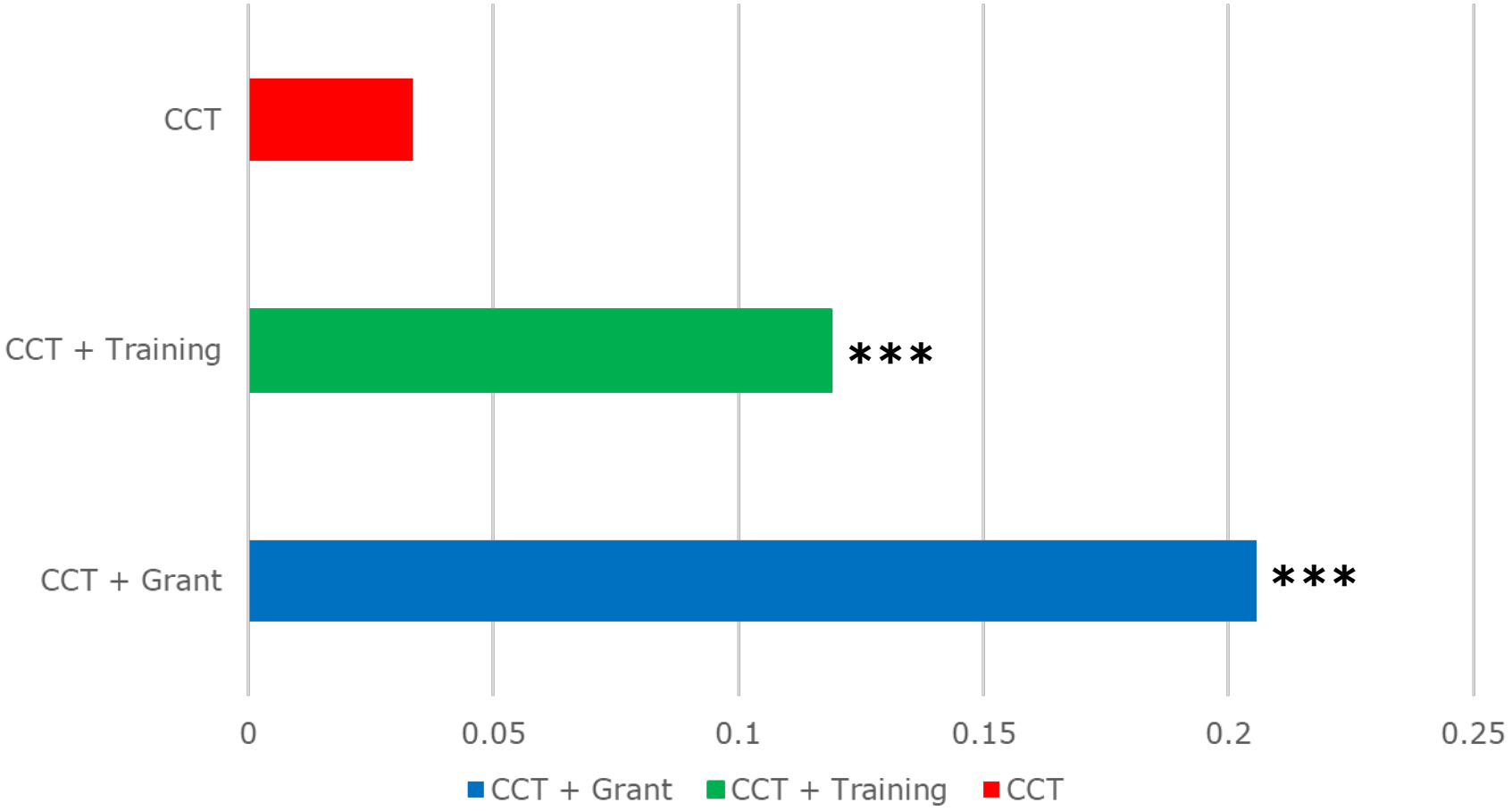
   -> Compare impacts across households assigned to various packages

What are the (average) impacts on welfare?
The CCT + grant had a lasting impact on welfare two years after the end of the program…



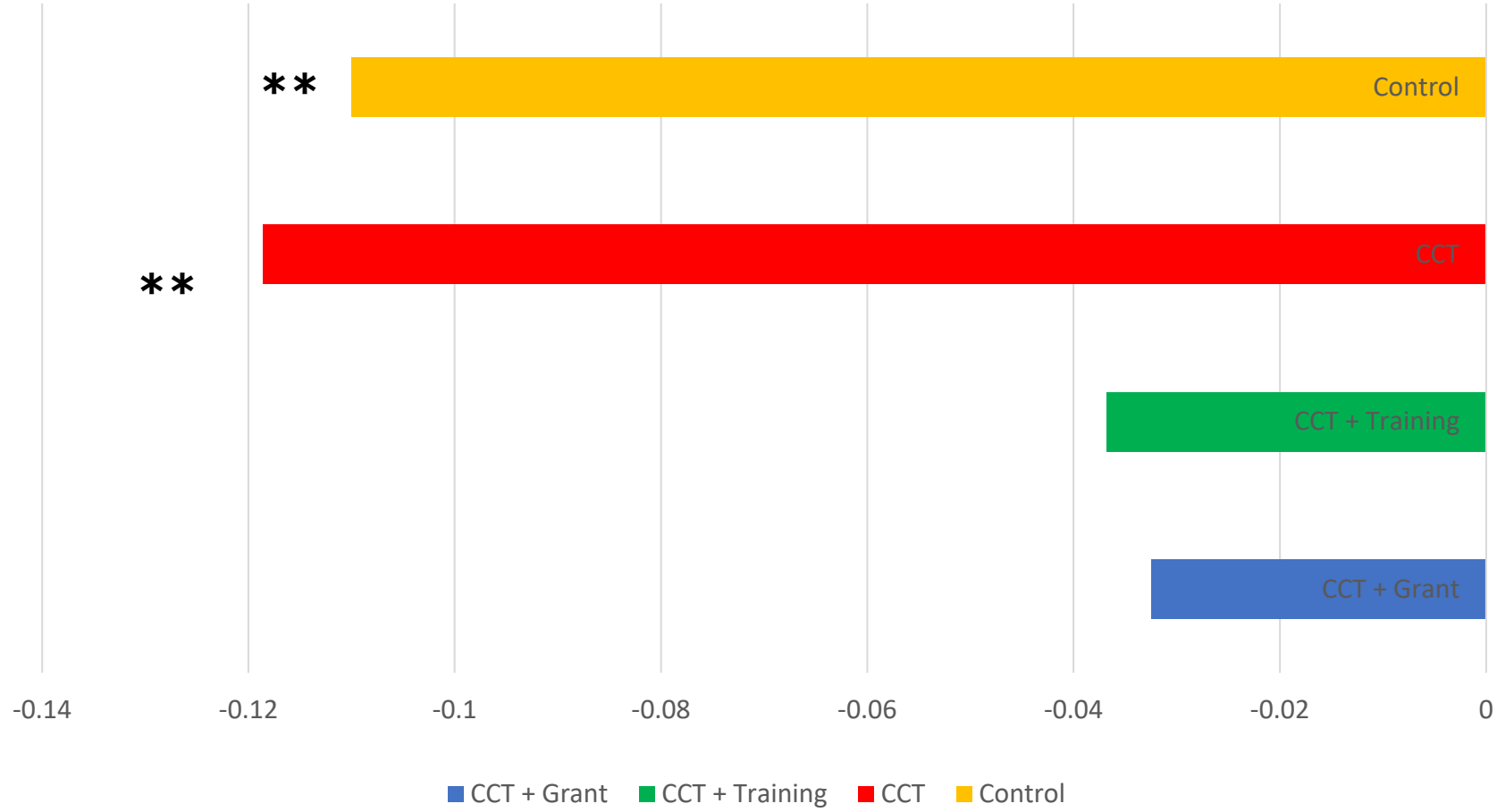
Impact on log(earnings), measured through comparisons with control group

What are the impacts for households exposed to shocks? Both productive grant and training components offer protection against drought shocks



Impact on log(earnings) for households exposed to drought shocks of 1 standard deviation (coefficients of treatment + treatment x drought shock)

Are beneficiary households fully protected against drought shocks? Both productive grant and training components offer full protection against drought shocks



Effect of drought shocks on welfare after account for treatment effect, for households exposed to drought shocks of 1 standard deviation (coefficients of shock + treatment x shock)

Mechanisms

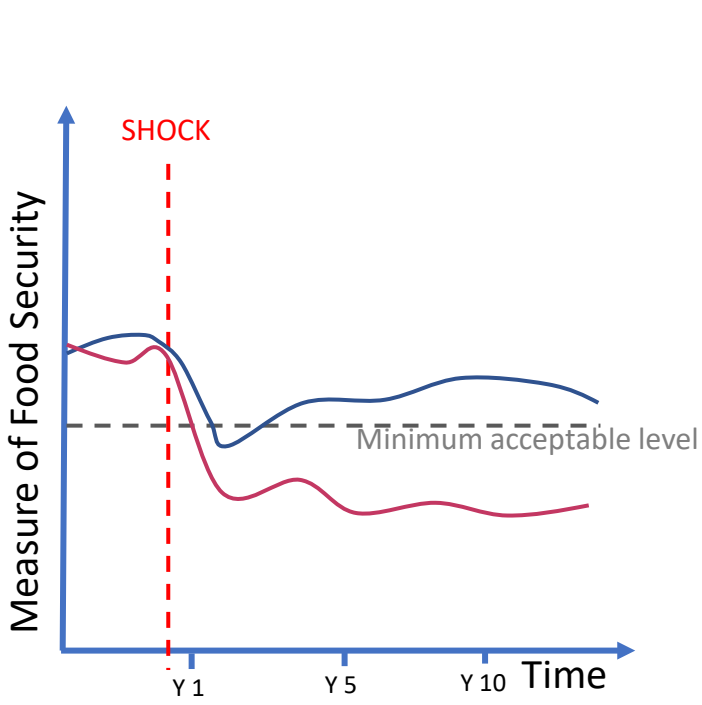
- Income diversification led to income smoothing that led to consumption smoothing
  - Income is less sensitive to shocks, thus consumption is also less sensitive to shocks

- CCT + grant facilitated entry into non-agricultural self-employment and increased profits in non-agricultural businesses
  - Diversification makes income smoother (less reliance on agriculture income only), beneficiaries also sell products outside the community,…

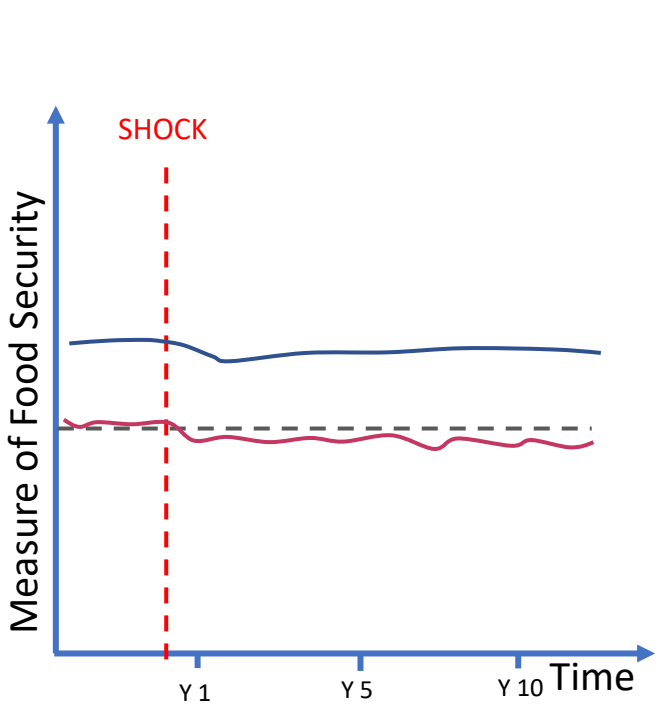
- CCT + training does not increase entry into non-agricultural wage jobs on average
  - But when shocks occur, training make households more likely to commute or migrate out to get jobs
  - (Some increases of earnings in wage jobs along the intensive margin, too)

Assessing WFP programs aiming to improve resilience capacities for food security

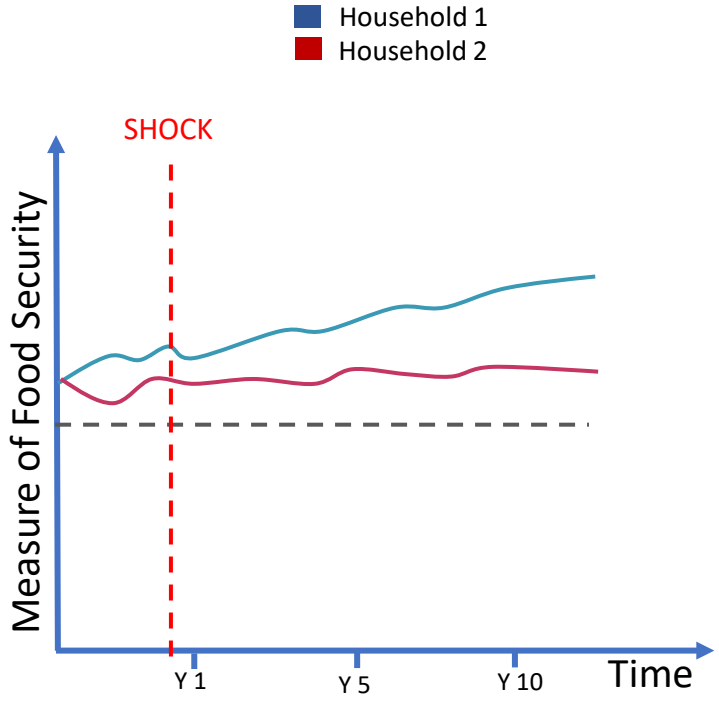
Shocks and the dynamics of food security over time.



The Blue household shows better **absorptive capacity.**



The Blue household is better **adapted** to the context.



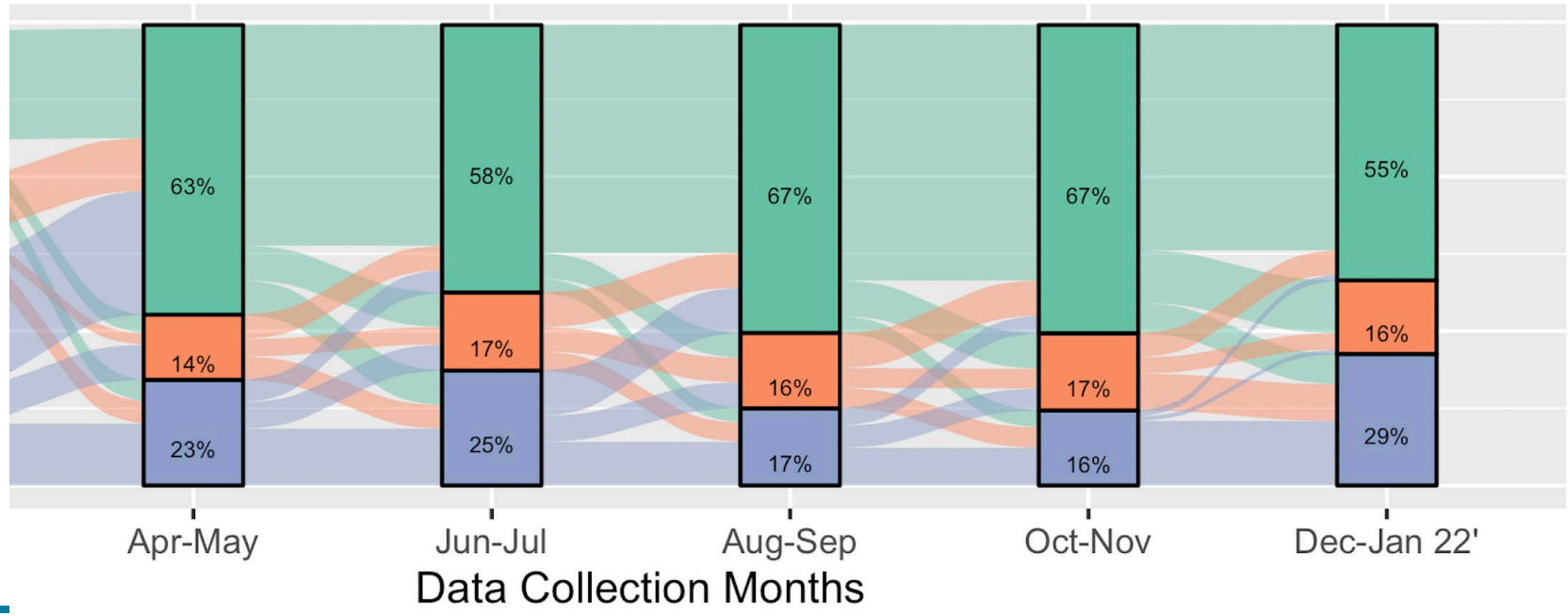
The Blue household shows better **transformative capacity.**

Using high-frequency data to observe trends in Food Security Indicators

We use high-frequency surveys to measure resilience through welfare dynamics over time

Every two months, we collect a short set of indicators in the treatment and control group.

We can then calculate how many months a household spend in food insecurity in a given year



Options to assess impacts on resilience

- Analyze impacts on households' ability to deal with shocks
  - E.g. Heterogeneity of program impact by exposure to drought shock
  - Works for a wide variety of shocks (but not if they are fully covariate shock affecting everyone)

- Collect high-frequency data to observe welfare dynamics

Thank you!

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